



# UNITED STATES PATENT AND TRADEMARK OFFICE

*ellm*  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/697,533      | 10/30/2003  | Alfred T. Rundle     | 12078-194           | 7577             |

26486 7590 11/22/2006

BURNS & LEVINSON, LLP  
(FORMERLY PERKINS SMITH & COHEN LLP)  
125 SUMMER STREET  
BOSTON, MA 02110

EXAMINER

KRASNIC, BERNARD

ART UNIT PAPER NUMBER

2621

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                               |  |
|------------------------------|-------------------------------|-------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/697,533 | Applicant(s)<br>RUNDLE ET AL. |  |
|                              | Examiner<br>Bernard Krasnic   | Art Unit<br>2621              |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/2/2004 and 10/30/2003</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: reference number "160", a "system", as mentioned in paragraph [0045], lines 3-5, reference number "260", a "server", as mentioned in paragraphs [0045], [0048], [0049].
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: reference numbers "30" and "65" in Fig. 1, reference numbers "8", "12", and "15" in Fig. 3, and reference number "340" in Fig. 5.
3. The drawings are objected to because the use of reference numbering in Fig. 3 should be consistent and therefore it is suggested to include further reference numbering for the remaining un-numbered blocks.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

4. The disclosure is objected to because of the following informalities:

Page 1, line 1: It is suggested to include the missing -- CROSS-REFERENCE TO RELATED APPLICATIONS -- section followed by -- This application which claims the benefit of U.S. Provisional No. 60/422,311, filed October 30, 2002. --.

Page 1, last line: The sentence is cut off and incomplete. "in contact with" should be -- in contact with such hazardous material. --.

Page 2, top line: This new paragraph is to be preceded by the missing paragraph number -- [0004] --.

Page 15, Table 1: The title "Detectable Image Characteristics" should be --  
Detectable Image Characteristics --.

Page 21, paragraph 3: "Referring to Figures 2 and 5" should be -- Referring to  
Figures 2 and 4 --.

Page 24, Table 2: The titles "Detection Rate" and "Return-Address Style" should  
be -- Detection Rate -- and -- Return-Address Style --.

Page 25, Table 2: The titles "Characteristic", "Detection Rate", and "Clear Area  
Infringement" should be -- Characteristic --, -- Detection Rate --, and -- Clear  
Area Infringement --.

Page 26, Table 2: The titles "Image Type" and "Detection Rate" should be -- Image  
Type -- and -- Detection Rate --.

Page 28, paragraph [0044]: Reference number "320 should be -- 330 -- as seen  
in Fig. 5.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly  
claiming the subject matter which the applicant regards as his invention.

6. Claims 5-21, 23, 24, and 27 are rejected under 35 U.S.C. 112, second  
paragraph, as being indefinite for failing to particularly point out and distinctly claim the  
subject matter which applicant regards as the invention.

Art Unit: 2621

Re Claims 5, 10, 15, and 24: The limitation "wherein the at least one image characteristic is selected" renders these claims indefinite because it is unclear which image characteristic is being mentioned or referred to. It is suggested to be -- wherein the at least one image characteristic for the image of the mail piece and for one of the predetermined profiles is selected -- and has been treated as such.

Re Claims 6, 11, and 16: The limitation "if the at least one image characteristic present in the retrieved data substantially matches the at least one image characteristic from the retrieved data" renders these claims indefinite because a comparison between two same components is being made. It is suggested to combine the limitations of claim 6 with claim 7, combine the limitations of claim 11 with claim 12, and combine the limitations of claim 16 with claim 17 so as to read -- if the at least one image characteristic present in the retrieved data substantially matches the at least one image characteristic for the image of the mail piece -- in which a comparison between two different components is considered. It has been treated as such.

Claims 7-9 are dependent upon claim 6.

Claims 12-14 are dependent upon claim 11.

Art Unit: 2621

Claim 17 is dependent upon claim 16.

Re Claim 18: The limitation "a fourth memory" in line 2 renders this claim indefinite because a third memory is not mentioned in its preceding (11, 13, and 14) claims. It is suggested "a fourth memory" should be -- a third memory --.

Re Claims 19, 20, 21, and 27: The limitation "wherein the at least one image characteristic comprises" renders these claims indefinite because it is unclear which image characteristic is being mentioned or referred to. It is suggested to be -- wherein the at least one image characteristic for the image of the mail piece comprises -- and has been treated as such.

Re Claim 23: The limitations "retrieving the data" in line 2, "profiles from the database" in line 4, and "identified by the action identifier" in line 10 are insufficient antecedent basis. It is suggested to be -- retrieving a data --, -- profiles from a database --, and -- identified by an action identifier --.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3, 5-15, 18, and 22-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Ryan Jr. et al (US 7,071,437 B2).

Re Claims 1 and 22: Ryan Jr. discloses a method for identifying mail pieces for special processing based upon predetermined characteristics, the method comprising the steps of a) storing a plurality of predetermined profiles, each of the predetermined profiles having at least one image characteristic (22 and 26) (see Fig. 9a, col. 4, lines 46-48, col. 5, lines 20-65, col. 9, lines 26-29); b) obtaining at least one image characteristic for an image of a mail piece (14) (see Fig. 9a, col. 4, lines 40-42, col. 5, lines 11-18); c) retrieving one of the predetermined profiles (see Fig. 9a, Computer system 100 retrieves data from the address database 22 or 26, col. 4, lines 46-48, col. 9, lines 25-32, col. 10, lines 63-68, col. 12, lines 13-15); d) comparing (S208) the at least one image characteristic for the image of the mail piece to the at least one image characteristics present in the one of the predetermined profiles (see Fig. 9c, col. 12, lines 13-15); e) identifying the mail piece for special processing / divert for further processing (S210) (see Fig. 9c, col. 12, lines 18-21, 49-53, 58-61), if the at least one image characteristic present in the one of the predetermined profiles



substantially matches the at least one image characteristic for the image of the mail piece.

This is similarly applied to claim 22 where instead of a method comprising of several steps, a system comprising of several means plus functions to produce those same steps respectively is considered. Ryan Jr. teaches all the limitations in the same respective manner as described above for claim 1. In regards to the two extra limitations presented in claim 22, Ryan discloses a transport sub-system (16) capable of transporting a mail item (see Fig. 9a, col. 4, line 42, col. 11, liens 33-35), and an imaging sub-system (14) capable of obtaining an image of the mail piece (see Fig. 9a, lines 41-42, col. 5, lines 11-18).

The limitations as recited in claim 22 in lines 6, 9, 11, 12, and 16, “means for storing”, “means for obtaining”, “means for retrieving”, “means for comparing”, and “means for identifying”, invoke 35 USC 112, 6<sup>th</sup> paragraph.

Re Claim 2: Ryan Jr. discloses f) repeating steps / further processing c) through e) for another one of the plurality of predetermined profiles, if the at least one image characteristic present in the one of the predetermined profiles does not substantially match the at least one image characteristic for the image of the mail piece (see col. 12, lines 50-54, 58-61, col. 13, lines 22-26).

Re Claim 3: Although Ryan Jr. is silent in disclosing at least one image characteristic for the image of the mail piece to the at least one image

characteristic present in the one of the predetermined profiles occurs during real-time processing, it is apparent to the examiner that it is an inherent feature because in order to have an efficient and reliable processing mail system, it has to be real-time processing (see col. 1, lines 42-45).

Re Claims 5, 10, 15, and 24 respectively: Ryan Jr. discloses postage, address, addressee, handwriting characteristics, etc (see col. 5, lines 50-57).

Re Claims 6 and 11 as understood: Ryan Jr. discloses a system enabling identification of mail pieces based upon predetermined characteristics, the system comprising: means for obtaining an image (14) of a mail piece (see Fig. 9a, col. 4, lines 40-42, col. 5, lines 11-18); means for obtaining at least one image characteristic for the image of the mail piece (see col. 5, lines 11-18); at least one processor (110) (see Fig. 1a, col. 4, lines 34-35); a first memory (22, 26 108, 114) for storing data for access by a process executed by at least one processor (see Fig. 9a, col. 4, lines 46-48), said memory comprising: a) a database (22 and 26) storing data for each one of a plurality of predetermined profiles (see Fig. 9a, col. 4, lines 46-48), the data comprising: an identifier, at least one image characteristic, and, an action identifier / address, addressee, and divert (see col. 5, lines 20-65); and, b) at least one second memory (153) having computer readable code embodied therein (see Fig. 9a, col. 12, lines 18-21), the computer readable code capable of causing the at least one processor

to: retrieve the data for one of the plurality of predetermined profiles from the database (see Fig. 9a, Computer system 100 retrieves data from the address database 22 or 26, col. 4, lines 46-48, col. 9, lines 25-32, col. 10, lines 63-68, col. 12, lines 13-15), compare (S208) the at least one image characteristic for the image of the mail piece to the at least one image characteristic from the retrieved data (see Fig. 9c, col. 12, lines 13-15), identify (S210) the mail piece as requiring the action identified by the action identifier (divert for further processing, see Fig. 9c, col. 12, lines 18-21, 49-53, 58-61) from the retrieved data, if the at least one image characteristic present in the retrieved data substantially matches the at least one image characteristic from the retrieved data.

This is similarly applied to claim 6. Ryan Jr. teaches all the limitations in the same respective manner as described above for claim 11.

The limitations as recited in claims 6 and 11 in lines 3-4, "means for obtaining an image" and "means for obtaining at least one image characteristic", invoke 35 USC 112, 6<sup>th</sup> paragraph.

Re Claims 7 and 12 respectively: Ryan Jr. discloses to retrieve the data corresponding to another predetermined profile from the plurality of predetermined profiles from the database (see Fig. 9a, Computer system 100 retrieves data from the address database 22 or 26, col. 4, lines 46-48, col. 9, lines 25-32, col. 10, lines 63-68, col. 12, lines 13-15), compare (S208) the at least one image characteristic for the image of the mail piece to the at least one

image characteristic from the retrieved data (see Fig. 9c, col. 12, lines 13-15), identify (S210) the mail piece as requiring the action identified by the action identifier / divert for further processing from the retrieved data (see Fig. 9c, col. 12, lines 18-21, 49-53, 58-61), if the at least one image characteristic from the retrieved data substantially matches the at least one image characteristic for the image of the mail piece.

Re Claims 8, 13, and 25 respectively: Ryan Jr. discloses means for communicating with a network (27 and 28a) (web server communicates with investigation entity, see Fig. 9a, col. 13, lines 60-67).

The limitation as recited in claims 8, 13, and 25 in line 2, "means for communicating", invoke 35 USC 112, 6<sup>th</sup> paragraph.

Re Claims 9, 14, and 26 respectively: Ryan Jr. discloses a remote server (27) capable of receiving and sending data (see Fig. 9a, col. 13, lines 60-67).

Re Claim 18 as understood: Ryan Jr. discloses a fourth memory (28a) for storing data for access by a process executed by the remote server, said memory including a database (28a) (see Fig. 9a, col. 13, lines 60-67).

Re Claim 23: Ryan Jr. discloses means for retrieving the data corresponding to another predetermined profile from the plurality of predetermined profiles from

the database (see Fig. 9a, Computer system 100 retrieves data from the address database 22 or 26, col. 4, lines 46-48, col. 9, lines 25-32, col. 10, lines 63-68, col. 12, lines 13-15), means for comparing (S208) the at least one image characteristic for the image of the mail piece to the at least one image characteristic from the retrieved data (see Fig. 9c, col. 12, lines 13-15), means for identifying (S210) the mail piece as requiring the action identified by the action identifier / divert for further processing from the retrieved data (see Fig. 9c, col. 12, lines 18-21, 49-53, 58-61), if the at least one image characteristic from the retrieved data substantially matches the at least one image characteristic for the image of the mail piece.

The limitations as recited in claim 23 in lines 2, 5, and 9, "means for retrieving", "means for comparing", and "means for identifying", invoke 35 USC 112, 6<sup>th</sup> paragraph.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan Jr. in view of Lopez (US 2002/0029202 A1). The teachings of Ryan Jr. have been discussed above.

However, Ryan Jr. fails to disclose or fairly suggest that the comparison occurs during an offline process.

Lopez discloses the step of comparing the at least one image characteristic for the image of the mail piece to the at least one image characteristic present in the one of the predetermined profile occurs during offline processing (506, 509, and 511) (see Figure 5, paragraph [0057], attempts to locate the return address for the diverted mail piece).

Therefore, in view of Lopez, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ryan Jr.'s method by including the ability to do comparisons during offline processing in order enhance performance and time efficiency because if it is a mail piece that needs to be returned to the sender, it does not need immediate attention and could be sorted for processing during offline processing.

11. Claims 16 and 17 as understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan Jr. in view of Bloomfield (US 6,025,931). The teachings of Ryan Jr. have been discussed above.

However, Ryan Jr. fails to disclose or fairly suggest at least one third memory having computer readable code capable of causing the at least one processor to retrieve the data, compare, and identify if the action is required.

Bloomfield discloses at least one third memory / RAM (206) (see Fig. 3, col. 7, 55-57, col. 8, lines 4-16) having computer readable code capable of causing the at least one processor / CPU (206) (see Fig. 3, col. 8, lines 4-16) to retrieve the data for one of the plurality of predetermined profiles from the database (120, 116, and 200) (see Fig. 1, Fig. 3, col. 7, lines 49-59, have a database of the different e-mail addresses that exist), compare the at least one image characteristic for the image of the mail piece (283) to the at least one image characteristic from the retrieved data (see Fig. 5, the email address is compared to the database of email addresses, col. 7, lines 49-59), identify the mail piece as requiring the action identified by the action identifier from the retrieved data (see col. 7, lines 49-59, return the email back to the sender if the email address for the intended recipient doesn't exist), if the at least one image characteristic present in the retrieved data substantially matches the at least one image characteristic from the retrieved data or for the image of the mail piece. In general, Bloomfield integrates a Fax to an internet server where the fax is able to scan the letter for the email address which is to be sent (see abstract), compares the email address to the list of emails that exist, and route it appropriately, if the email address doesn't exist, return the email to the sender. This could easily be incorporated to the web server component of Ryan Jr.'s system.

Therefore, in view of Bloomfield, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ryan Jr.'s system by including a third memory as part of the remote server in order to include the capability of sending emails from the use of hard copy documents.

12. Claims 19-21, and 27 as understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan Jr. in view of Kagehiro et al (Pat. US 6,246,794 B1). The teachings of Ryan Jr. have been discussed above.

However, Ryan Jr. fails to specifically (see col. 5, lines 51-53 of Ryan Jr., poorly typed or handwritten) disclose or fairly suggest at least one image characteristic comprises at least one handwriting characteristic; and, wherein said one of the predetermined profiles comprises at least one distinguishing handwriting characteristic for one individual.

Kagehiro discloses at least one image characteristic comprises at least one handwriting characteristic (201, 203, and 204) (see Fig. 2, col. 8, lines 18-29); and, wherein said one of the predetermined profiles comprises at least one distinguishing handwriting characteristic for one individual (208) (see Fig. 2, col. 6, lines 64-68, col. 7, lines 1-7).

Therefore, in view of Kagehiro, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ryan Jr.'s method and system by including the capability to have handwritten mail image characteristics in order to enhance efficiency by being able to even process all



Art Unit: 2621

handwritten mail, which is a large portion of mail that is sent into the postal system.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Uhl discloses a method and device for online processing of forwarding mail; Govindaraju discloses a system for recognizing handwritten words of cursive script; Sansone discloses a method for determining if mail contains life harming materials; Sansone discloses a method and system for identifying mail pieces having similar attributes to suspected contaminated mail pieces; Sansone discloses a method and system for detection of contaminants in mail pieces; Bonner discloses a method and apparatus for reading and decoding information; Hirabayashi discloses a website management system receives customer's handwriting or word processor original document through mail and transmits e-mail to web site through internet.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Krasnic whose telephone number is (571) 270-1357. The examiner can normally be reached on Mon-Thur 7:30am-5:00pm and every other Friday 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on (571) 272-7044. The fax phone

Art Unit: 2621

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bernard Krasnic  
November 15, 2006

A handwritten signature in black ink, appearing to read 'J. Lee', with a large, stylized loop at the beginning.

JONG SUK LEE  
SUPERVISORY PATENT EXAMINER